

Mr. David Lisak
I/N Tek & I/N Kote
30755 Edison Road
1 Vision Drive
New Carlisle, Indiana 46552-9728

Re: Minor Source Modification No:
141-12209-00040

Dear Mr. Lisak:

I/N Tek & I/N Kote applied for a Part 70 operating permit on December 2, 1996, for a continuous cold mill, a continuous hot dip galvanizing line and an electrolytic galvanizing line at a metal coil manufacturing source. An application to modify the source was received on May 4, 2000. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for modification at the source:

Change of the gears on the Tandem Cold Mill portion of the Continuous Descale Cold Mill that will affect the following processes and equipment at the cold mill. The changing of the gears will increase the sources line speed when processing narrower steel coils.

- (a) One (1) pinch roll leveler, known as EU1, equipped with a fabric filter for particulate matter control, exhausted through stack 1, installed on October 15, 1987, capacity: 881,840 pounds per hour of hot rolled steel strip in coil form.
- (b) One (1) flash butt welder, known as EU2, equipped with a in-line separator and a fabric filter for particulate matter control, exhausted through stack 2, installed on October 15, 1987, capacity: 881,840 pounds per hour of hot rolled steel strip in coil form.
- (c) One (1) tension leveler, known as EU3, equipped with a fabric filter for particulate matter control, exhausted through stack 3, installed on October 15, 1987, capacity: 881,840 pounds per hour of hot rolled steel strip in coil form.
- (d) One (1) descale acid pickling line, known as EU4, equipped with a counter-current packed tower scrubber and mist eliminator, exhausted through stack 4, installed on October 15, 1987, capacity: 881,840 pounds per hour of hot rolled steel strip in coil form.
- (e) One (1) tandem cold mill, known as EU5, equipped with a baffle plate collision mist eliminator, exhausted through stack 5, installed on October 15, 1987, capacity: 881,840 pounds per hour of hot rolled steel strip in coil form.

The proposed Minor Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). The source may begin operation upon issuance of the source modification approval.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.
If you have any questions on this matter call (800) 451-6027, press 0 and ask for Autumn Marker or extension 3-0242, or dial (317) 233-0242.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments

AMM

cc: File - St. Joseph County
U.S. EPA, Region V
St. Joseph County Health Department
Northern Regional Office
Air Compliance Section Inspector - Rick Reynolds
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

PART 70 MINOR SOURCE MODIFICATION OFFICE OF AIR MANAGEMENT

**I/N Tek & I/N Kote
30755 Edison Road
New Carlisle, Indiana 46552**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 141-12209-00040	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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SECTION A

SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary continuous cold mill, a continuous hot dip galvanizing line and an electrolytic galvanizing line at a metal coil manufacturing source.

Responsible Official: Gary Van Asperen
Source Address: 30755 Edison Road, New Carlisle, Indiana 46552
Mailing Address: 30755 Edison Road, New Carlisle, Indiana 46552
Phone Number: 219-654-1317
SIC Code: 3316 and 3471
County Location: St. Joseph County
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Major Source, under PSD;
Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

Change of the gears on the Tandem Cold Mill portion of the Continuous Descale Cold Mill that will affect the following processes and equipment at the cold mill. The changing of the gears will increase the sources line speed when processing narrower steel coils.

- (a) One (1) pinch roll leveler, known as EU1, equipped with a fabric filter for particulate matter control, exhausted through stack 1, installed on October 15, 1987, capacity: 881,840 pounds per hour of hot rolled steel strip in coil form.
- (b) One (1) flash butt welder, known as EU2, equipped with a in-line separator and a fabric filter for particulate matter control, exhausted through stack 2, installed on October 15, 1987, capacity: 881,840 pounds per hour of hot rolled steel strip in coil form.
- (c) One (1) tension leveler, known as EU3, equipped with a fabric filter for particulate matter control, exhausted through stack 3, installed on October 15, 1987, capacity: 881,840 pounds per hour of hot rolled steel strip in coil form.
- (d) One (1) descale acid pickling line, known as EU4, equipped with a counter-current packed tower scrubber and mist eliminator, exhausted through stack 4, installed on October 15, 1987, capacity: 881,840 pounds per hour of hot rolled steel strip in coil form.
- (e) One (1) tandem cold mill, known as EU5, equipped with a baffle plate collision mist eliminator, exhausted through stack 5, installed on October 15, 1987, capacity: 881,840 pounds per hour of hot rolled steel strip in coil form.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability)

because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Permit No Defense [IC 13]

This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this approval, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.
- (b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this approval:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided in this approval, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission unit(s) vented to the control equipment is in operation.

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

Testing Requirements [326 IAC 2-7-6(1)]

C.7 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

- (a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM, within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this approval. All monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.9 Pressure Gauge Specifications

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.

C.10 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.11 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this approval shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this approval is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this approval.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.12 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;

- (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this approval;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

C.13 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) The reports required by conditions in Section D of this approval shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (c) Unless otherwise specified in this approval, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report(s) does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Change of the gears on the Tandem Cold Mill portion of the Continuous Descale Cold Mill that will affect the following processes and equipment at the cold mill. The changing of the gears will increase the sources line speed when processing narrower steel coils.

- (a) One (1) pinch roll leveler, known as EU1, equipped with a fabric filter for particulate matter control, exhausted through stack 1, installed on October 15, 1987, capacity: 881,840 pounds per hour of hot rolled steel strip in coil form.
- (b) One (1) flash butt welder, known as EU2, equipped with a in-line separator and a fabric filter for particulate matter control, exhausted through stack 2, installed on October 15, 1987, capacity: 881,840 pounds per hour of hot rolled steel strip in coil form.
- (c) One (1) tension leveler, known as EU3, equipped with a fabric filter for particulate matter control, exhausted through stack 3, installed on October 15, 1987, capacity: 881,840 pounds per hour of hot rolled steel strip in coil form.
- (d) One (1) descale acid pickling line, known as EU4, equipped with a counter-current packed tower scrubber and mist eliminator, exhausted through stack 4, installed on October 15, 1987, capacity: 881,840 pounds per hour of hot rolled steel strip in coil form.
- (e) One (1) tandem cold mill, known as EU5, equipped with a baffle plate collision mist eliminator, exhausted through stack 5, installed on October 15, 1987, capacity: 881,840 pounds per hour of hot rolled steel strip in coil form.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-1]

Pursuant to 326 IAC 6-1, the PM emission rates from the pinch roll leveler, flash butt welder, tension leveler, descale acid pickling line, and tandem cold mill shall not exceed 0.03 grains per dry standard cubic foot.

D.1.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to PSD permit 141-2750-00040/00046, issued October 28, 1996,

(a) the PM emissions rate shall be limited as follows:

- | | | |
|-----|----------------------------------|---------------------|
| (1) | pinch roll leveler (EU1) | 0.5 pounds per hour |
| (2) | flash butt welder (EU2) | 0.1 pounds per hour |
| (3) | tension leveler (EU3) | 0.8 pounds per hour |
| (4) | descale acid pickling line (EU4) | 0.8 pounds per hour |
| (5) | tandem cold mill (EU5) | 6.6 pounds per hour |

(b) the PM emissions shall be:

- (1) collected from the pinch roll leveler (EU1) by a hood and exhaust system with a design flow rate of 12,000 standard cubic feet per minute, exhausting through a fabric filter.

- (2) collected from the flash butt welder (EU2) by a ventilation system with a design flow rate of 7956 standard cubic feet per minute, exhausting through an in-line separator and a fabric filter. The entire welding electrode system shall be enclosed.
- (3) collected from the tension leveler (EU3) by a hood and exhaust system with a design flow rate of 22,732 standard cubic feet per minute, exhausting through a fabric filter.
- (4) collected from the descale acid pickling line (EU4) under negative pressure by a ventilation system with a design flow rate of 35,235 standard cubic feet per minute, exhausting through a counter-current packed tower scrubber with a mist eliminator installed above the packing. The pickling tanks shall be equipped with water-sealed edge covers.
- (5) collected from the tandem cold mill (EU5) by a ventilation system with a design flow rate of 147,667 standard cubic feet per minute, exhausting through two (2) Hitachi Baffle Plate Collision Type 1 (or equivalent) mist eliminators.

D.1.3 PSD Significance Levels [326 IAC 2-2] [40 CFR 52.21]

Pursuant to CP 141-2750-00040/00046 issued October 28, 1996, I/N Tek emissions of sulfur dioxide, carbon monoxide, volatile organic compounds, lead, asbestos, beryllium, mercury, vinyl chloride, fluorides, sulfuric acid mist and total reduced sulfur compounds (including hydrogen sulfide) shall not exceed the annual significant emission levels established in 40 CFR 52.21 or 326 IAC 2-2.

D.1.4 Opacity

Pursuant to CP 141-2750-00040/00046 issued October 28, 1996, visible emissions from any stack, process exhaust, control device or building roof monitor shall not exceed five (5) percent opacity based on twenty-four (24) readings taken in accord with 40 CFR 60, Appendix A, Method 9 and 326 IAC 5-1.

D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.1.6 Particulate Matter (PM)

- (a) Pursuant to CP 141-2750-00040/00046 issued October 28, 1996, the fabric filter for PM control shall be in operation at all times when the EU1, EU2, and EU3 are in operation.
- (b) Pursuant to CP 141-2750-00040/00046 issued October 28, 1996, the scrubbers for PM control shall be in operation at all times when the EU4 and EU5 are in operation.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**PART 70 SOURCE MODIFICATION
CERTIFICATION**

Source Name: I/N Tek & I/N Kote
Source Address: 30755 Edison Road, New Carlisle, Indiana 46552
Mailing Address: 30755 Edison Road, New Carlisle, Indiana 46552
Source Modification No.: 141-12209-00040

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Part 70 Minor Source Modification

Source Background and Description

Source Name:	I/N Tek & I/N Kote
Source Location:	30755 Edison Road, New Carlisle, IN 46552
County:	St. Joseph County
SIC Code:	3316 and 3471
Operation Permit No.:	T141-7316-00159
Operation Permit Issuance Date:	not yet issued
Minor Source Modification No.:	141-12209-00040
Permit Reviewer:	Autumn M. Marker

The Office of Air Management (OAM) has reviewed a modification application from I/N Tek & I/N Kote relating to the modification of the following emission units and pollution control devices:

Change of the gears on the Tandem Cold Mill portion of the Continuous Descale Cold Mill that will affect the following processes and equipment at the cold mill. The changing of the gears will increase the sources line speed when processing narrower steel coils.

- (a) One (1) pinch roll leveler, known as EU1, equipped with a fabric filter for particulate matter control, exhausted through stack 1, installed on October 15, 1987, capacity: 881,840 pounds per hour of hot rolled steel strip in coil form.
- (b) One (1) flash butt welder, known as EU2, equipped with a in-line separator and a fabric filter for particulate matter control, exhausted through stack 2, installed on October 15, 1987, capacity: 881,840 pounds per hour of hot rolled steel strip in coil form.
- (c) One (1) tension leveler, known as EU3, equipped with a fabric filter for particulate matter control, exhausted through stack 3, installed on October 15, 1987, capacity: 881,840 pounds per hour of hot rolled steel strip in coil form.
- (d) One (1) descale acid pickling line, known as EU4, equipped with a counter-current packed tower scrubber and mist eliminator, exhausted through stack 4, installed on October 15, 1987, capacity: 881,840 pounds per hour of hot rolled steel strip in coil form.
- (e) One (1) tandem cold mill, known as EU5, equipped with a baffle plate collision mist eliminator, exhausted through stack 5, installed on October 15, 1987, capacity: 881,840 pounds per hour of hot rolled steel strip in coil form.

History

On May 4, 2000, I/N Tek & I/N Kote submitted an application to modify the gears on the Tandem Cold Mill portion of the Continuous Descale Cold Mill. The changing of these gears will allow for a higher line speed. The increased line speed will allow the source to produce a larger quantity of their lighter and narrower products. The current maximum throughput for this facility is 881,840 pounds per hour of hot rolled steel strip in coil form. The changing of the gears will not increase the maximum throughput of 881,840 pounds per hour because this throughput is limited by the current drive system. The current drive system will not be changing, nor will the drive system be affected by the gear change.

The emissions from the above process are PM, PM10 and VOC. Emissions from this facility are related to the mass of the product that is being processed. Because there will be no change in the current drive system, the processing of the wider, heavier gauge coils which have the highest mass will not be affected. Processing the wider, heavier gauge coils allows the facility to operate at the maximum throughput of 881,840 pounds per hour. Due to a lack of emission factors associated with this process, previous allowable particulate limits were based on the grain loading of the control equipment. Therefore, the method used to determine the potential emissions from the changing of the gears is to look at the past actual operating hours. The assumption is then made that the change could potentially allow the source to operate 8,760 hours per year. To determine the potential emissions from this change, the emissions based on the actual operating hours would be compared to the emissions at 8,760 hours of operation.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 4, 2000. Additional information was received on June 8, 2000, and June 16, 2000.

Emission Calculations

See Appendix A of this document for detailed emissions calculations.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	7.19

PM-10	7.19
SO ₂	--
VOC	8.04
CO	--
NO _x	--

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Minor Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(d)(4)(A), modifications that would have a potential to emit less than twenty-five (25) tons per year and equal to or greater than five (5) tons per year of either particulate matter (PM) or particulate matter less than ten (10) microns (PM10).

County Attainment Status

The source is located in St. Joseph County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. St. Joseph County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) St. Joseph County has been classified as attainment or unclassifiable for all pollutant(s). Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	greater than 250
PM-10	greater than 250
SO ₂	less than 100
VOC	less than 100
CO	greater than 100, less than 250

NO _x	greater than 250
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This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
new gears on the Tandem Cold Mill	7.19	7.19	–	8.04	–	–	--
PSD significance levels	25	15		40			

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

State Rule Applicability - Individual Facilities

326 IAC 6-1 (Nonattainment Area Limitations)

Pursuant to CP 141-2750-00040/00046 issued October 28, 1996, the PM emission rates from the I/N Tek tandem cold mill shall be limited to 0.03 grains per dry standard cubic foot and PM emissions shall be collected from the tandem cold mill (EU5) by a ventilation system with a design flow rate of 147,667 standard cubic feet per minute, exhausting through two (2) Hitachi Baffle Plate Collision Type 1 (or equivalent) mist eliminators.

326 IAC 2-2 (Prevention of Significant Deterioration)

Pursuant to CP 141-2750-00040/00046 issued October 28, 1996, I/N Tek emissions of sulfur dioxide, carbon monoxide, volatile organic compounds, lead, asbestos, beryllium, mercury, vinyl chloride, fluorides, sulfuric acid mist and total reduced sulfur compounds (including hydrogen sulfide) shall not exceed the annual significant emission levels established in 40 CFR 52.21 or 326 IAC 2-2.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 141-12209-00040.

Appendix A

Emissions Calculations

Emission units affected by the installation of the new gears on the Tandem Cold Mill:

Pinch Roll Leveler (EU1)
 Flash Butt Welder (EU2)
 Tension Leveler (EU3)
 Descale Acid Pickling Line (EU4)
 Tandem Cold Mill (EU5)

PARTICULATE MATTER EMISSIONS

Emission Unit	Allowable Emissions	Actual Emissions for 1998 (based on 7135 hours of operation)	Actual Emissions for 1999 (based on 7098 hours of operation)	Average Actual Emissions for 1998/1999
Pinch Roll Leveler (EU1)	0.5 pounds/hour 2.2 tons/year	1.78 tons	1.77 tons	1.78 tons
Flash Butt Welder (EU2)	0.1 pounds/hour 0.44 tons/year	0.36 tons	0.35 tons	0.36 tons
Tension Leveler (EU3)	0.8 pounds/hour 3.5 tons/year	2.85 tons	2.84 tons	2.85 tons
Descale Acid Pickling (EU4)	0.8 pounds/hour 3.5 tons/year	2.85 tons	2.84 tons	2.85 tons
Tandem Cold Mill (EU5)	6.6 pounds/hour 28.9 tons/year	23.55 tons	23.42 tons	23.48 tons
Total Emissions (tons/year)	38.5 tons	31.39 tons	31.23 tons	31.31 tons

Past actual to future potential = Change in potential emissions

38.5 tons (future potential) - 31.31 (past actuals) = 7.2 tons per year of particulate

VOC EMISSIONS

VOC content of the rolling oil = 0.1 pounds per gallon

Rolling oil density = 7.53 pounds per gallon

Year	Rolling oil usage, lbs	Rolling oil density, lbs/gallon	Rolling oil VOC content, lbs/gallon	Annual emissions tons/year	Annual Steel Production, tons/year	VOC emission factor, lbs VOC/ton
1999	847,500	7.53	0.1	5.63	1,555,784	0.0072

1999 was used because improvements in the process have been made in order to reduce rolling oil usage.

Using the 0.0072 pounds of VOC per ton of steel factor, the potential to emit would be:

$$\frac{881,400 \text{ lbs steel/hour}}{2000 \text{ lb/ton}} \times 0.0072 \text{ lbs VOC/ton steel} = 3.17 \text{ lbs/hour}$$

OR

$$3.17 \text{ lbs/hour} \times \frac{8760 \text{ hours/year}}{2000 \text{ lb/ton}} = 13.9 \text{ tons/year}$$

Using the average actual VOC emissions for the past two years of 5.86 tons per year, the maximum increase in VOC emissions (based on 8760 hours of operation) would be:

$$13.9 \text{ tons/year} - 5.86 \text{ tons/year} = 8.04 \text{ tons/year}$$

Both the particulate and VOC potential emissions from the changing of the gears on the Tandem Cold Mill do not exceed the PSD significance levels. Therefore, 326 IAC 2-2 is not applicable.